

8 April 1988

FR0MP-A

METER, FREQUENCY

1. GENERAL. This procurement requires a direct reading, cavity type, waveguide-coupled frequency meter.

2. CLASSIFICATION. The equipment shall be Type II, Class 6, Style E, and Color R for Navy applications in accordance with MIL-T-28800.

3. MEASUREMENT REQUIREMENTS. The equipment shall be capable of frequency measurement over the range of 12.4 GHz or less to at least 18.0 GHz within the specifications and accuracies set forth below.

3.1 Readout resolution. The readout resolution shall be 5 MHz or less.

3.2 Accuracy. The equipment shall be accurate to within 0.1% of the indicated frequency.

3.3 Resonance. The rf absorption of the equipment shall be at least 1.0 dB at resonance.

3.4 Connections. The equipment input and output flange connections shall mate to a waveguide WR62 (UG-419/U) connector.

4. GENERAL REQUIREMENTS.

4.1 Power source. The power source requirements of MIL-T-28800 are not invoked.

4.2 Dimensions and weight. The size and weight of the equipment shall be consistent with current commercial capabilities and shall not exceed the maximum dimensions for shipboard applications specified in MIL-T-28800. The weight shall not exceed 4.5 kg (10 lb).

4.3 Lithium batteries. Per MIL-T-28800, lithium batteries are prohibited without prior authorization. A request for approval for the use of lithium batteries, including those encapsulated in integrated circuits, shall be submitted to the procuring activity at the time of submission of proposals. Approval shall apply only to the specific model proposed.

4.4 Calibration interval. The calibration interval shall be 12 months minimum. The equipment model shall be within all accuracy requirements specified herein, with a 72% or greater confidence factor following a calibration interval of 12 months.